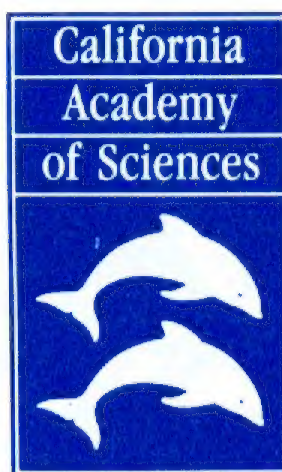


The ACADEMY NEWSLETTER

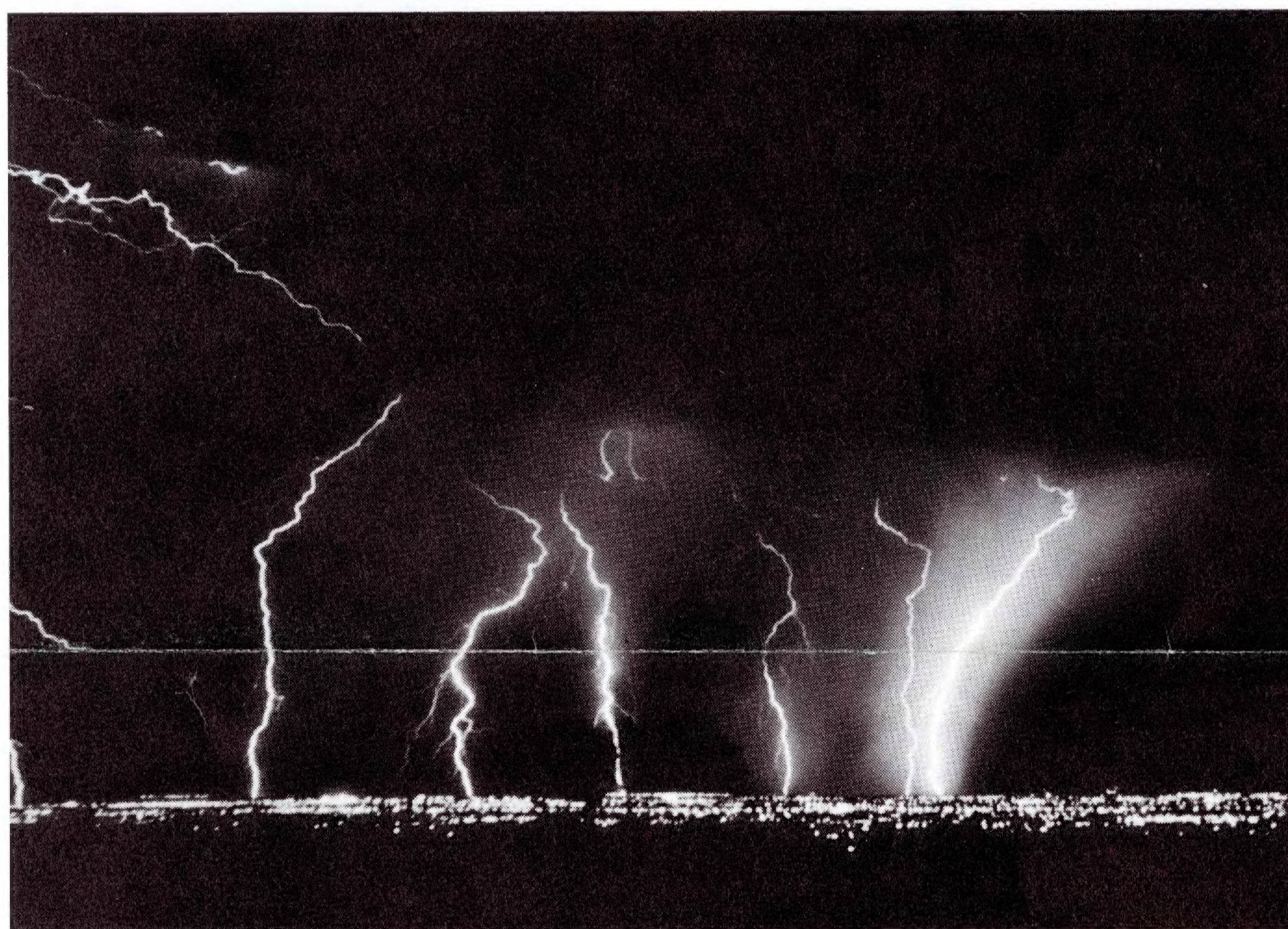
January 1987



They Ran to the Far Side

Blue skies and high spirits marked the Run to the Far Side II on November 30. 7,800 runners joined cartoonist Gary Larson on a loop course through Golden Gate Park for this event which has become very popular both with serious runners and the never-quite-serious Larson fans. Brad Hawthorne and Patti Gray were the first man and woman across the 10K finish line followed by dedicated runners, fun runners, cave men, a giant squid, and a 20-foot baby carried by five giant ants. Proceeds from the run will benefit the new giant reptile displays in the Aquarium.

Lightning Strikes the Academy!



J.L. "Woody" Wooden

On January 24, lightning will strike the Academy . . . and then linger on to demonstrate the beauty and power of this natural phenomenon. The new exhibit combines art and science, light and sound to teach and amaze visitors about a dramatic energy source.

Lightning hits the earth 100 times each second with a power greater, in a major thunder storm, than an atomic bomb. To bring this power into the halls of the Academy on a safe and informative scale the exhibition features hands-on displays, including a lightning machine capable of recreating flashes and sounds; a plasmasphere with drifting colored vapors showing the movement of light molecules; a "crank-n-spark" machine that can be hand turned to generate vol-

tage; and a Leyden jar similar to the one Benjamin Franklin used to prove lightning is electricity.

Today's technology makes the physical causes of lightning easily understood, but long before man grasped these scientific principles he recognized the enormous power of this phenomenon and included it in art and mythologies. Lightning motifs are found in fashion, on coins and corporate images, and heroes such as Zeus are shown with lightning as a symbol of power. Examples of these artistic and cultural uses, as well as images of lightning captured in spectacular photographs by J.L. "Woody" Wooden and others, are part of this exciting exhibition.

"Lightning!" was made possible in part by a grant from PG&E. It will continue in Cowell Hall Gallery through June 14, 1987.

The Academy Store Opens Its Doors: January 1

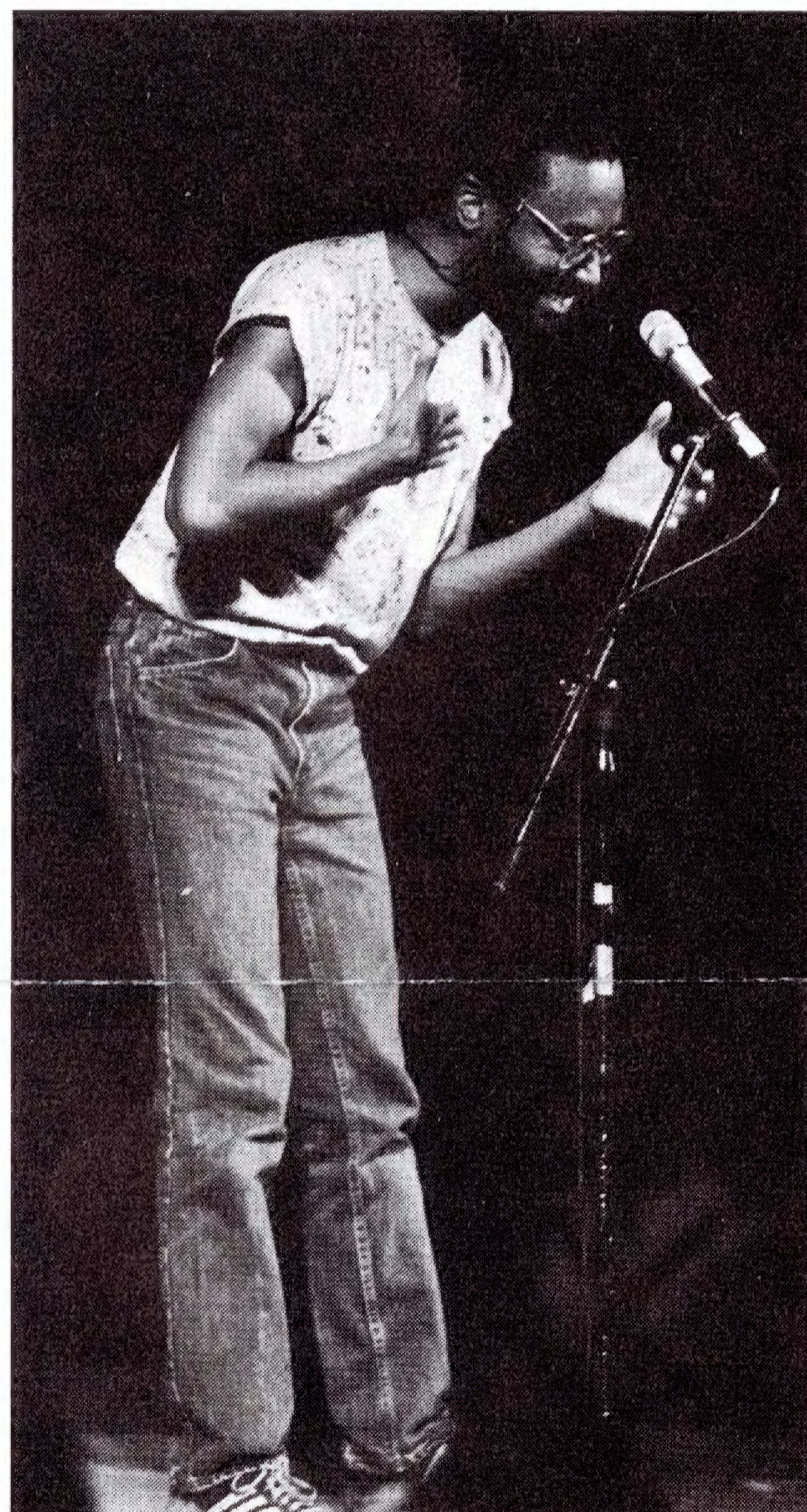
Start the New Year right — with a shopping spree! The Academy Store, owned and operated by the California Academy of Sciences, will welcome its first customers on January 1. Members will receive a 10% discount on all merchandise, much of which is produced exclusively for the Store. High quality, unique items reflect the many facets of the Academy's collections and fields of research. Specially commissioned silk scarves, tote bags, T-shirts and note cards are the tip of the iceberg now available in the beautiful new facility at the north end of Cowell Hall.

Keep up with the latest in science in the book section which carries a full range of titles on natural history. Members can also special order additional titles.

Shoppers at the Academy Store have it all — unique, high quality products at affordable prices — and every purchase benefits the oldest scientific institution in the West.

Planetarium Concert Series Begins with the Music of Bobby McFerrin

Bobby McFerrin and the Voicestras are an orchestra of sounds without instruments. This local musician, who is quickly being recognized as a walking treasure of music and sound, will open the Spring Concert Series in Morrison Planetarium on January 13



Marty Sohl

Bobby McFerrin

at 8 p.m. with a concert that will redefine the meaning of singing. Trained as a jazz vocalist, McFerrin uses his voice to create sounds of undeniable mood, energy and rhythm. The Voicestras are a uniquely appropriate accompaniment to McFerrin, combining their rich voices into every sound imaginable.

Future concerts in the spring series are Sukay, playing the pan pipes of the Andes on February 10; Patrick Ball and Kevin Carr recreating Irish music and legends on March 17; Masayuki Koga and Michiyo Harada playing Shakuhachi flute and koto on April 28; and Hatsegana offering Gypsy music on May 12.

Tickets for Bobby McFerrin and the Voicestras are \$10 for members, \$12 for non-members. The other concerts in the series are \$5 for members and \$7 for non-members. Series tickets which include the McFerrin concert are \$25 for members and \$35 for non-members. Tickets are available by sending a check and a self-addressed, stamped envelope to Morrison Planetarium, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118. No refunds or exchanges. Call (415) 750-7127 for information.

Laserium Blends Music and Light Into Vivid Memories

Lasers were once the lights of science fiction, but now they have been tamed and choreographed by laserists into a beautiful visual experience. Add to the dramatic lasers the sounds of musical favorites played on a powerful sound system and the result is Laserium, now beginning its tenth year in Morrison Planetarium. Two new concerts, "Rainbow Cadenza" with symphonic classical music and "The Police" featuring hits by

this popular group, have been added to the schedule which also includes the continuing favorites of "Pink Floyd II" and "LaserSpace." The audience can bring their own small radios with headsets and tune to the Planetarium's own FM frequency to enjoy the program at their chosen volume. Enjoy a memorable evening of light and music at Laserium; call (415) 750-7138 for the schedule of concerts.

January Members' Meeting Features Academy's Research Projects in New Guinea



John Ottaway

Dr. Daphne Fautin will recount her recent research activities at the Academy's field station in New Guinea on January 14 and 15, at the regularly scheduled monthly members' meetings in Morrison Auditorium.

An associate curator of Invertebrate Zoology, Dr. Fautin recently spent 8 weeks in Madang Province, New Guinea observing the behavior of anemone fish. Immune to the usually fatal toxins of anemones, the vivid orange and white banded fish spend their days competing for prime real estate within the brilliant blue, chestnut and lime green anemones. In these pristine waters filled with vibrantly colored reef life, Dr. Fautin continued her research with a new sense of urgency; because of increased human impact and the development of manufacturing on the islands, the quality of the water is beginning to deteriorate.

For those who can't get to New Guinea for a January diving vacation, the next best thing is to share in Dr. Fautin's underwater explorations. Slide/lectures are on January 14 at 2:00 and 8:00 p.m. and January 15 at 8:00 p.m. Members should be prepared to show their membership card at the door; guests are welcome with the guest passes that are issued to each member.

Next month's meeting on February 11 and 12 will be James Morgan presenting a slide/lecture on "Battles of the Bighorn."

Animals: The Best of '86 Closes February 1

Where can you catch the smug look of pride on the snout of an alligator as it emerges from its egg? Or see a whooping crane leaping into his finest dance to attract a mate? Or watch a grizzly emerge from the curtain of a snowstorm? See all of this and more at "Animals: The Best of '86" the exhibition featuring the juried works of the Society of Animal Artists. Founded in 1960,

the society is the oldest and most prestigious association of wildlife artists in the world; its members are the inheritors of a tradition of portraying animals that goes back to the cave paintings of Europe and Africa. This exhibition in Lovell White Hall features the work of 87 painters and sculptors including Roger Tory Peterson, Robert Bateman, Charles Frace, Richard Ellis, and John Seery-Lester. Animals from around the world are depicted in their natural habitats with a grace and style that gives a special appreciation to their role in the natural world. The last day of the exhibi-

tion is February 1. Catalogs can be purchased at the Academy Store.



"Leaving the Nest"
by Fred Machetanz

"Moonlore" Rises in Morrison Planetarium

The moon has always been an object of fascination for residents of earth who tracked its dependable path across the skies. Love, werewolves, crops, tides, and lunacy are just a few of the phenomena that have been linked to the phases of the moon. In the new sky show entitled "Moonlore" opening January 9 in the Planetarium, the myths and legends will be explored for all their thrill and romance and scientific validity. Learn the American Indian legend of why wolves howl at the moon, experience earthshine, ponder the mystery of transient lunar phenomena, and wonder whether the moon can turn hearts as well as tides at "Moonlore" January 9 through March 22. Sky shows are daily at 2:00 p.m. and weekends at 1:00, 2:00, 3:00 and 4:00 p.m.

Keeping tabs on the January moon is simple at "Exploring the Skies of the Season." Shows recreate the path of the moon and other celestial bodies as seen from the Bay Area. The Planetarium's 3,000 watt projector, the only one ever designed and built on site by a planetarium staff, uses its unique systems to create a comfortable evening under 3,800 stars every weekend at noon.

Earthquake Study Moves to Academy — Aftershocks of 1906 Continue



Founding members of the San Francisco Earthquake Research Project, which is unearthing important new information on the great quake of 1906, were recently appointed Associates in Seismology at the California Academy of Sciences. They are, above, City Archivist, Gladys Hansen, broadcast journalist David Fowler, and San Francisco Fire Department photographer Richard Hansen.

"As a team these three individuals have compiled extraordinary files on the 1906 earthquake, files that will have a significant impact on the ultimate interpretation of that disaster," said Dr. Peter Rodda, Chairman of the Academy's Department of Invertebrate Zoology and Geology. "Based on their information so far, it would appear that the 1906 quake was much more destructive

than was reported at the time, and their research will not only cause history books to be rewritten, but will be of inestimable value to professional groups including seismologists, engineers, and city planners."

Up to now, the San Francisco Earthquake Research Project has had no formal base of operations. Members of the team were insistent that their files remain in San Francisco and the Academy is the logical and appropriate institution to serve as the project's archival repository and headquarters. The Academy of Sciences lost most of its research and museum collections during the 1906 disaster, so it is with particular enthusiasm that the museum welcomes this important team to the research division.

You Can Help the San Francisco Earthquake Research Project

For over 20 years, Gladys Hansen has been piecing together the puzzle of the actual extent of damage and casualties caused by the 1906 earthquake and fires. Her search, and now the team's efforts, have been helped by people who had family in the City at

that time. You may have missing pieces of this great puzzle at home. Look for letters, diaries, journals, family histories, anything written about the events during and following the quake. Of particular help are photographs taken by survivors that show damage to neighborhoods. "A picture of a home in the Western Addition, or some other area, with a missing chimney provides valuable information," says Hansen. "And anything can be returned; we only need to borrow material for duplication," she says.

If you can help, please call Dr. Peter Rodda at (415) 750-7080 or write to San Francisco Earthquake Research Project, California Academy of Sciences, Golden Gate Park, San Francisco, Ca. 94118.

Academy Library Opens New Doors to Learning

The Academy's J.W. Mailliard Library is an invaluable resource for members with an interest in natural history. In conjunction with the Academy's every-growing outreach into education, librarian Tom Moritz is encouraging college students, advanced high school students, teachers, and members with a specific interest to use the collections and the expertise of the staff.

Moritz, who took over leadership of the 170,000 volume non-circulating reference library in early 1986, wishes to see "a more expansive view of the role of a library than is often typical." He feels that a library should be active and outgoing, anticipating needs, and be easily accessible to scientists, students and educators. In keeping with this vision, Moritz and his staff are inviting members with serious research interests and teachers who wish assistance in developing science curricula to visit the library on weekdays from 8:30 a.m. to 5:00 p.m., or to call (415) 750-7102 with simple reference questions.

Travel Adventure Fills 1987

For more than ten years the Academy has offered a variety of unique and thrilling travel adventures to destinations around the world. Expeditions this year include exotic and enjoyable tours that guarantee a lifetime of rich memories.

River Rafting Adventures

"There is nothing — absolutely nothing — half so much worth doing as simply messing about in boats. . ."

Wind in the Willows

Rivers are the highways through some of America's most spectacular wilderness areas where we enjoy nature walks, delicious meals around a campfire, and great companions. We travel on "river-time," the special relaxing pace when events flow as the river flows.

Wilderness Grand Canyon
Leader: Jean DeMouthe,
Geologist
April 5-10

Our popular annual expedition provides members the opportunity to visit seldom-seen portions of the Grand Canyon on a five-day float trip and hiking adventure. Starting at Pierce Ferry, we enter the Canyon through the dramatic gates of the Grand Wash Cliffs, moving up the river to Separation Canyon by motorized raft, then floating down by oar power. Short day hikes into the pristine areas such as Columbine Falls, In-

dian Caves, and Gneiss Canyon are supplemented with informal lectures on the geology, archaeology, and natural history of the Canyon. Participants should be in excellent physical condition and enjoy camping. Cost is \$555 plus transportation to Las Vegas.

The Rogue River
Whitewater Adventure
Leader: Dr. Robert Drewes,
Herpetologist
June 19-23

This is a camping and whitewater trip along the magnificent Rogue River in southern Oregon. The river, with its sparkling white water chutes and quiet swimming sections, winds through the richly forested Siskiyou Mountains. The wildlife is plentiful in this beautiful area — one may see deer, great blue herons nesting in the treetops, osprey diving for trout, bear scrambling along hillsides, and perhaps a shy river otter. There will be ample time to enjoy nature walks and informal lectures around the campfire. Participants should be in excellent physical condition and should enjoy sleeping out under the stars. Costs are \$575 plus transportation to Galice, Oregon.

Other 1987 Expeditions:

Baja California Circumnavigated
March 30-April 15
Leader: Dr. James C. Kelley

Guatemala: Heartland of the Ancient Maya
April 5-21
Leader: Dr. John Carlson
\$2100 land plus \$498 air fare

Papua New Guinea
July 15-August 6

Coastal Maine and the Bay of Fundy
August 7-19

The Swiss and Italian Alps
August 21-September 6
Leader: Dr. Frank Almeda

Canyon of Time:
America's Southwest
September 22-October 3

Brazil and Argentina
September 23-October 12

Oriental Odyssey:
Burma and Thailand
November 2-24

The Academy Travel Office will be happy to answer questions about these expeditions; call (415) 750-7222.

Traditional Arts Builds Cultural Bridges

The world gets smaller every day. Since 1983 the Traditional Arts series has brought museum visitors closer to people and cultures around the world. Dr. Robert Sayers of the Academy's Anthropology Department who initiated the program believes, "The San Francisco Bay Area, with its multiplicity of ethnically defined social communities and recent immigrant groups, is an ideal location for folklife programming." To use this wealth of local talent, several hundred informal Saturday programs have offered crafts, music, food and general merriment presented by people who have a unique skill typical of their homeland. The schedule for January brings artists from five countries to share a part of their heritage with museum visitors. A grant from Paul L. and Phyllis Wattis Foundation makes it possible to present the programs free of charge after admission to the museum.

All programs begin at 1:00 p.m.



European Circus Time! January 3

January 3 - Circus time! Craig Sjogren and Letitia Bartlett mix acrobatics, stilt walking, juggling, and knockabout clowning in a fast-paced program that explores the physical roots of traditional European comic theater. Their antics are guaranteed to enchant children and adults alike!

January 10 - Children love to fold and cut paper doilies. At the age of 70, Israeli artist Zipora Neeman took up this ancient Jewish craft and polished it into the beautiful artform which dates back to medieval times. Using manicure scissors, Neeman creates intricate paper cuts that have been displayed in Israel, the United States and Canada. Anyone who brings their own scissors can learn how to make these fragile, lace-like patterns with symbolic motifs.



January 17 - Music from the kitchen! Barbara Mendelson displays her virtuosity on the spoons and, along with Kevin Carr on the fiddle, plays a medley of American folk tunes. Bring a pair of spoons and learn to dish out some catchy tunes.

January 24 - Laotian refugee Kouei On Sea Lee demonstrates the skills of silver threadwork and engraving to fabricate intricate costume ornaments worn by Iu Mien tribespeople.

January 31 - A feast for the eyes! Richard West shows how to make Swedish sausage using a recipe his mother brought from the Old Country.

The Magic is Mime

Ed Holmes will capture the imagination of children in a special Young Audiences performance of the art of mime on Sunday, January 25 at 1:00 p.m. Mime is the universal unspoken language — acting out situations and emotions shared by all mankind. This program is sponsored by Young Audiences, Inc. a group which is dedicated to bringing high quality performing arts to children.

Although most programs take place in classrooms of Bay Area Schools, the Academy also hosts a performance each month for children visiting the museum. Mr. Holmes shares the mysteries and rich traditions of the expressive art form of mime free to children after regular admission to the museum. Young Audiences is sponsored by the McKesson Foundation, Inc.

Special Exhibits Continue to Delight Visitors

"Lifelong Safari" offers a journey around the world without leaving the room. Dr. Edward S. Ross has the artist's eye and the photographer's skill to have sensitively recorded the land and people he has visited in his worldwide travels as an entomologist. Color photographs trace his journeys in exotic lands through May 3 in Hohfeld Gallery.

There are only a few days left to see "Chimpanzees of Gombe Stream." The large photographs of Dr. Jane Goodall's study group of chimps in Tanzania will be returned to the National Geographic Society after January 11.

Golden Gate Park
San Francisco, California 94118-9961
(415) 221-5100

Open every day of the year
from 10 until 5

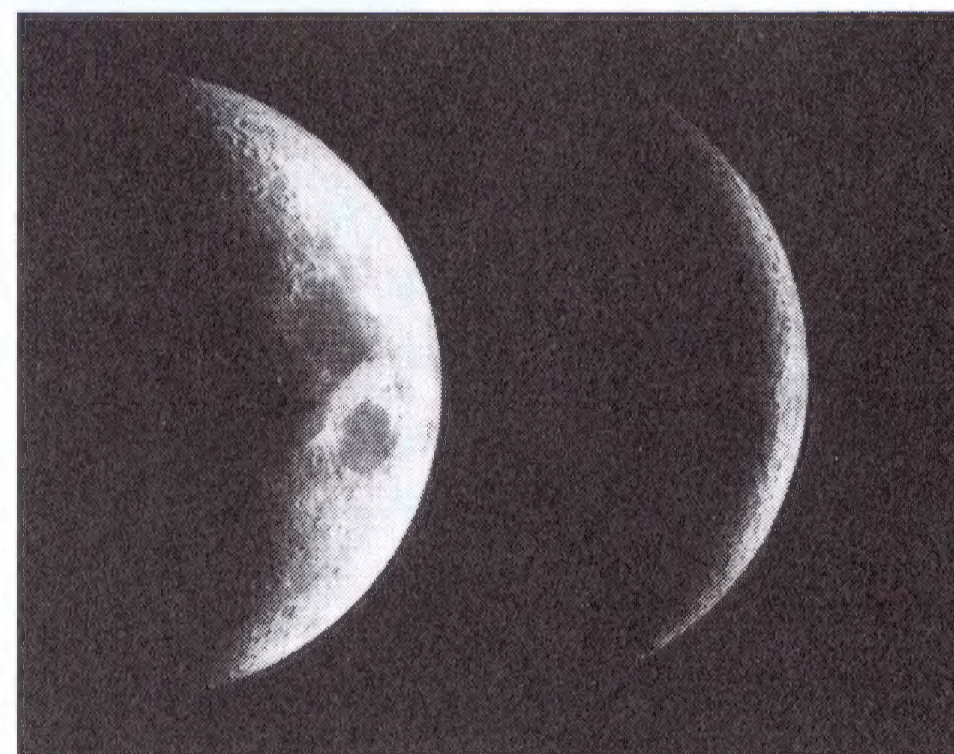


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January Events Start The New Year With A Bang!

- 3 Traditional Arts - circus antics/1:00 p.m.
- 9 "Moonlore" opens in Planetarium
- 10 Traditional Arts - cut paper/1:00 p.m.
- 13 Bobby McFerrin and the Voicestras in the Planetarium/write for tickets
- 14 Members' Meeting - Dr. Daphne Fautin discusses research in New Guinea/2:00 and 8:00 p.m.
- 15 Members' Meeting/8:00 p.m.
- 17 Traditional Arts - American folk music/1:00 p.m.
- 24 Opening of "Lightning!"
- 24 Traditional Arts - Laotian needlework/1:00 p.m.
- 25 Young Audiences - mime Ed Holmes/1:00 p.m.
- 31 Traditional Arts - Swedish sausage/1:00 p.m.

Hale Observatories



The new sky show entitled "Moonlore" is shown daily in Morrison Planetarium beginning January 9.

Looking Ahead To February

- 1 Last day of "Animals: The Best of '86"
- 11 Members' Meeting - Battles of the Bighorn/2:00 and 8:00 p.m.
- 12 Members' Meeting/8:00 p.m.

The February Newsletter will have a complete list and description of activities.